Amendments to the Claims

1. (Currently Amended) A checkpointing method of stabilizing a wireless communication systems during an upgrade of services, the wireless communication system having a primary controller comprising a first version of a control application, a secondary controller comprising a ~~second~~ replicated first version of a control application, and a checkpointing service, the method comprising the steps of:

operating the first version of a control application by the primary controller to control the wireless communication system;

saving state data in a first format, wherein the state data is representative of a stable operation of the wireless communication system, and wherein the first format of the state data is compatible with the first version of a control application;

utilizing the checkpointing service to save the first format of the state data to the secondary ~~processor~~ controller;

upgrading the ~~second~~ replicated first version of a control application on the second controller to create an upgraded second version of a control application;

quiescing the primary controller;

operating the upgraded second version of a control application on the second controller after the quiescing of the primary controller to control the wireless communication system;

converting the saved first format state data ~~from the first format~~ to a second format of the state data, wherein the second ~~state data~~ format of the state data is compatible with the upgraded second version of a control application; and

operating the upgraded second version of a control application to control the wireless communication system, wherein the second version utilizes the converted second version of the state data to ensure wireless communication stability.

2. (Currently Amended) A method as defined in claim 1, wherein the wireless communication system further has a version control table containing the version number ~~or~~ for the first version of a control application on the primary controller and the ~~second version of a control application~~ replicated first version of a control application.

3. (Currently Amended) A method as defined in claim 2, wherein the step of upgrading the replicated first version of a control application on the second controller thereby creating an upgraded second version of a control application further comprises the steps of:

updating the version control table with the new version number of the upgraded second version of a control application; and

comparing the version number ~~or~~ for the replicated first version of a control application on the secondary controller to the version number for the upgraded second version of a control application on the secondary controller to determine the upgraded second version of a control application has been upgraded.

4. (Original) A method as defined in claim 1, wherein the wireless communication system comprises a network element.

5. (Original) A method as defined in claim 4, wherein the network element is an element selected from the group consisting of a Base Transceiver Station (BTS), a Mobile Switching Center (MSC), a Base Station Controller (BSC), a Centralized Base Station Controller (CBSC), a Radio Network Controller (RNC), a Gateway Switching Node (GSN), a Node B, and a mobile unit.

6. (Currently Amended) A checkpointing method of stabilizing a wireless communication systems during a downgrade of services, the wireless communication system having a primary controller comprising a first version of a control application, a secondary controller comprising a ~~second~~ replicated first version of a control application, and a checkpointing service, the method comprising the steps of:

operating the first version of a control application by the primary controller to control the wireless communication system;

saving state data in a first format, wherein the state data is representative of a stable operation of the wireless communication system, and wherein the first format of the state data is compatible with the first version of a control application;

utilizing the checkpointing service to save the first format of the state data to the secondary ~~processor~~ controller;

downgrading the ~~second~~ replicated first version of a control application on the second controller to create a downgraded second version of a control application;

converting the saved first format of the state data ~~from the first format~~ to a second format of the state data, wherein the second ~~state data~~ format of the state data is compatible with the downgraded second version of a control application;

quiescing the primary controller;

operating the downgraded second version of a control application to control the wireless communication system; and

operating the second version of a control application to control the wireless communication system, wherein the second version utilizes the converted second version of the state data to ensure wireless communication stability.

7. (Currently Amended) A method as defined in claim 6, wherein the wireless communication system further has a version control table containing the version number ~~or~~ for the first version of a control application and the ~~second~~ replicated first version of a control application on the secondary controller.

8. (Currently Amended) A method as defined in claim 7, wherein the step of downgrading the ~~second~~ replicated first version of a control application on the secondary controller thereby creating an downgraded second version of a control application further comprises the steps of:

updating the version control table with the new version number of the downgraded second version of a control application; and

comparing the version number ~~or~~ for the replicated first version of a control application on the secondary controller to the downgraded second version of a control application on the secondary controller to determine the downgraded second version of a control application has been downgraded.

9. (Original) A method as defined in claim 6, wherein the wireless communication system comprises a network element.

10. (Original) A method as defined in claim 9, wherein the network element is an element selected from the group consisting of a Base Transceiver Station (BTS), a Mobile Switching Center (MSC), a Base Station Controller (BSC), a Centralized Base Station Controller (CBSC), a Radio Network Controller (RNC), a Gateway Switching Node (GSN), a Node B, and a mobile unit.

11. (Currently Amended) An apparatus for ensuring wireless communication stability during an update of a wireless communication system, the apparatus comprising:

a first computer processor running a first version of control software, the first computer processor further having a first database capable of saving state data in a first version format representative of steady state operation;

a second computer processor running a second version of control software, the second computer processor further having a second database capable of receiving the state data from the first database in a second version format to replicate the steady state operation of the first computer processor wherein the second computer processor running the second version of control software after the first computer processor has quiesced running the first version of control software;

a checkpointing service to transfer the steady state data from the first database to the second database; and

a control block to translate the steady state data from the first version format to the second version format.

12. (Original) An apparatus as defined in claim 11, wherein the wireless communication system comprises a network element.

13. (Original) An apparatus as defined in claim 12, wherein the network element is an element selected from the group consisting of a Base Transceiver Station (BTS), a Mobile Switching Center (MSC), a Base Station Controller (BSC), a Centralized Base Station Controller (CBSC), a Radio Network Controller (RNC), a Gateway Switching Node (GSN), a Node B, and a mobile unit.

14. (Currently Amended) A checkpointing method of stabilizing a system during an upgrade of services, the system having a primary controller comprising a first version of a control application, a secondary controller comprising a ~~secondary~~ replicated first version of a control application, and a checkpointing service, the method comprising the steps of:

operating the first version of a control application by the primary controller to control the system;

saving state data in a first format, wherein the state data is representative of a stable operation of the system, and wherein the first format of the state data is compatible with the first version of a control application;

utilizing the checkpointing service to save the first format of the state data to the secondary ~~processor~~ controller;

upgrading the ~~second~~ replicated first version of a control application on the second controller to create an upgraded second version of a control application;

quiescing the primary controller;

operating the upgraded second version of a control application on the second controller after the quiescing of the primary controller to control the system;

converting the saved first format of the state data from ~~the first format~~ to a second format of the state data, wherein the second state data format is compatible with the upgraded second version of a control application; and

operating the upgraded second version of a control application to control the system, wherein the second version utilizes the converted second version of the state data to ensure stability.

15. (Currently Amended) A checkpointing method of stabilizing a system during a downgrade of services, the system having a primary controller comprising a first version of a control application, a secondary controller comprising a ~~second~~ replicated first version of a control application, and a checkpointing service, the method comprising the steps of:

operating the first version of a control application by the primary controller to control the system;

saving state data in a first format, wherein the state data is representative of a stable operation of the system, and wherein the first format of the state data is compatible with the first version of a control application;

utilizing the checkpointing service to save the first format of the state data to the secondary ~~processor~~ controller;

downgrading the ~~second~~ replicated first version of a control application on the second controller to create a downgraded second version of a control application;

converting the saved first format of the state data ~~from the first format~~ to a second format of the state data, wherein the second ~~state data~~ format of the sate data is compatible with the downgraded second version of a control application;

quiescing the primary controller;

operating the downgraded second version of a control application to control the system; and

operating the second version of a control application to control the system, wherein the second version utilizes the converted second version of the state data to ensure stability.